

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Denatured carob flour comprising
sugars in an amount of 2 [[-]] to 15 % by weight ~~sugars~~,
cyclitols in an amount of 0.2 [[-]] to 1.5 % by weight ~~cyclitols~~ (pinitol),
lignins in an amount of 2 [[-]] to 10 % by weight ~~lignins~~,
celluloses in an amount of 10 [[-]] to 30 % by weight ~~celluloses~~,
hemicelluloses in an amount of 3 [[-]] to 20 % by weight ~~hemicelluloses~~,
pectins in an amount of 1 [[-]] to 6 % by weight ~~pectins~~,
denatured condensed tannins in an amount of 25 [[-]] to 55 % by weight
~~condensed tannins~~,
protein in an amount of 3 [[-]] to 9 % by weight ~~protein~~ and
water in an amount of less than 8 % by weight ~~water~~.
2. (Currently Amended) Denatured carob flour according to claim 1, wherein the sugar
~~content is~~ in an amount of between 3 [[-]] to 10 % by weight.
3. (Currently Amended) Denatured carob flour according to claim 1, wherein the
~~cyclitols content is~~ are in an amount of between 0.3 [[-]] to 1 % by weight.
4. (Currently Amended) Denatured carob flour according to claim 1, wherein the lignins
~~content is~~ are in an amount of between 2 [[-]] to 7 % by weight.
5. (Currently Amended) Denatured carob flour according to claim 1, wherein the
~~celluloses content is~~ are in an amount of between 15 [[-]] to 28 % by weight.

6. (Currently Amended) Denatured carob flour according to claim 1, wherein the hemicelluloses ~~content is~~ are in an amount of between 3 [[-]] to 9 % by weight.

7. (Currently Amended) Denatured carob flour according to claim 1, wherein the pectins ~~content is~~ are in an amount of between 2 [[-]] to 5 % by weight.

8. (Currently Amended) Denatured carob flour according to claim 1, wherein the condensed ~~tannins~~ tannins content is are in an amount of between 30 [[-]] to 48 % by weight.

9. (Currently Amended) Denatured carob flour according to claim 1, wherein the protein ~~content is~~ is in an amount of between 4 [[-]] to 8 % by weight.

10. (Currently Amended) Denatured carob flour according to claim 1, wherein the water ~~content is~~ is in an amount of less than 6 % by weight.

11. (Currently Amended) Process to obtain a flour according to claim 1, comprising the following steps:

- a. cleaning the whole carob fruits;
- b. crushing the whole carob fruits to provide carob seeds and carob pulp;
- c. separating the carob seeds and kibbled the carob pulp;
- d. toasting the separated carob pulp between 130 °C [[-]] and 200 °C;
- e. extracting the toasted carob pulp with water or solvent to remove sugars and water-soluble tannins;
- f. separating the soluble components out of the extracted carob pulp to produce insoluble residue;
- g. milling the insoluble residue into a powder comprising particles in which 90% of said particles exhibit a particle size below 250 µm;
- h. separating removing water from the insoluble residue;
- i. drying the milled insoluble residue to a water content of below 8 % by weight and
- j. classifying (sieving) the dried product.

12. (Currently Amended) Process according to claim 11, wherein in step b ~~[[.]]~~, the carob ~~pod~~ fruit is shredded into pieces smaller than 3 cm.

13. (Currently Amended) Process according to claim 11, wherein the toasting temperature is between 140 ~~[[.]]~~ and 150 °C.

14. (Currently Amended) Process according to claim 11, wherein the time period for the ~~toasting process~~ is between 5 minutes and ~~[[.]]~~ 60 minutes.

15. (Currently Amended) Process according to claim 14, wherein the time period for ~~toasting~~ is between 10 minutes and ~~[[.]]~~ 20 minutes.

16. (Currently Amended) Process according to claim 11, wherein in step c ~~[[.]]~~, the extraction is performed at a temperature in the range of 5 ~~[[.]]~~ to 80°C.

17. (Currently Amended) Process according to claim 11, wherein the extraction of ~~in~~ ~~step e [[.]]~~ is performed with water and the ratio of pulp to water is 1:20 (wt./wt.).

18. (Currently Amended) Process according to claim 11, wherein in step c ~~[[.]]~~, the extraction is performed for 5 minutes to 24 hours.

19. (Currently Amended) Process according to claim 11, wherein in step g ~~[[.]]~~, 90% of particles ~~are~~ have a particle size below 150 µm.

20. (Currently Amended) Process according to claim 11, wherein between steps g ~~[[.]]~~, and h ~~[[.]]~~, steps e ~~[[.]]~~, and f ~~[[.]]~~, are repeated at least once ~~repeated~~.

21. (Currently Amended) Process according to claim 11, wherein in step i ~~[[.]]~~, the drying is performed at a temperature which does not exceed 140 °C.

22. (Previously Presented) Process according to claim 11, wherein the process is carried out continuously.

23. (Previously Presented) Foods, dietary supplements, animal feed, pet food, human or animal medicine comprising flour according to claim 1.

24. (New) Denatured carob flour according to Claim 1, wherein said cyclitol is pinitol.

25. (New) Toasted carob flour comprising

sugars in an amount of 2 to 15 % by weight,
cyclitols in an amount of 0.2 to 1.5 % by weight,
lignins in an amount of 2 to 10 % by weight,
celluloses in an amount of 10 to 30 % by weight,
hemicelluloses in an amount of 3 to 20 % by weight,
pectins in an amount of 1 to 6 % by weight,
denatured condensed tannins in an amount of 25 to 55 % by weight,
protein in an amount of 3 to 9 % by weight and
water in an amount of less than 8 % by weight,

wherein said denatured condensed tannins are formed by a heat treatment of from 140 to 200 °C, and an effective amount of said toasted carob fiber induces a lower serum cholesterol level than a comparable amount of natural carob fiber.

26. (New) Process according to claim 11, wherein said process comprises a total of three extractions and imparts a sugar content within the resulting carob flour of less than 10%.